

38. A system for controlling the operations of a household appliance, the system including:

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- A. a microcontroller for operating the appliance;
  - B. a memory accessible by the microcontroller for storing information used by the microcontroller to operate the appliance, the memory storing
    - i. information for controlling the operations of certain components of the household appliance during various operating cycles;
    - ii. one or more predetermined first sets of parameters associated respectively with the operations of the components, the first sets of parameters being associated with a corresponding number of predetermined programs of operation involving the various operating cycles; and
    - iii. one or more second sets of parameters associated respectively with the operations of the components, the second sets of parameters being associated with a corresponding number of additional programs of operation involving the various operating cycles;
  - C. communication means for providing from an external source information that specifies the parameters for each of the second sets of parameters; and
  - D. a control panel for user selection of the set of parameters for use at a given time,

wherein the microcontroller uses the selected set of parameters to control the operations of the components in the various operating cycles to perform a given predetermined program or additional program.

39. The system of claim 38 wherein the control panel includes the communication means for providing the information that specifies the second sets of parameters.

40. The system of claim 38 wherein the stored information for controlling the operations relate to the general structure of underlying programs of operations that can be

performed by the appliance and to the logic governing the execution of the underlying programs.

41. The system of claim 40 wherein the microcontroller uses the selected set of parameters in conjunction with the underlying programs to operate the appliance in accordance with a predetermined program or an additional program.
42. The system, according to claim 40, wherein each of the predetermined and additional programs is subdivided into various treatment phases, and each phase is in turn characterized by parameters from the sets of parameters.
43. The system, according to claim 40, wherein the sets of parameters include information that controls the duration of each of the phases, temperature values being characteristic of the phases, the configuration and the mode of operation of one or more of the components of the appliance during the phases.
44. The system, according to claim 40, wherein each set of parameters includes information that identifies the associated program.
45. The system, according to claim 38, wherein the control panel includes a display device that displays data that identifies the predetermined and additional programs that can be selected.
46. The system, according to claim 45, wherein the displayed data identifies a program by an order number.
47. The system, according to claim 45, wherein the data identifies a program by a name represented in alphabetical, numerical or graphic characters.
48. The system, according to claim 45, wherein the data identifying a program includes

49. The system, according to claim 38, wherein the memory includes a part of a program memory of the microcontroller.

51. The system, according to claim 38, wherein the locations containing the second sets of parameters are locations in EEPROM.

52. The system, according to claim 39, wherein the communication means for providing information for the second set of parameters includes a serial port.

53. The system, according to claim 38, wherein the communications means for providing information includes an adaptor for connecting the appliance to a network, the adaptor providing communications between the network and the appliance.

54. The system, according to claim 38, wherein the communications means for providing information includes means for

- i. reading one of the first sets of parameters,
- ii. modifying the parameters to produce an associated second set of parameters, and
- iii. providing the associated second set of parameters to the memory to specify an associated additional program.

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the information includes a memory and the associated second set of parameters is stored therein.

56. The system, according to claim 38, wherein the communications means for providing information includes means for editing a stored second sets of parameters and storing the edited parameters as a new set of second parameters that correspond to a new additional program.

57. The system, according to claim 38, wherein the communication means for providing information includes a display for displaying the parameters in a graphic form.

58. The system, according to claim 38, including in the communication means for providing information a display for displaying information identifying the selected program of the appliance.

59. The system, according to claim 41, wherein the communication means for providing information includes a means for selecting from a given program a phase of interest and displaying at least some of the parameters relating to the selected phase.

60. The system, according to the claim 60, wherein said means displays all the modifiable parameters pertaining to the selected phase.

61. The system, according to claim 59, wherein the communication means further displays a Cartesian plane, which shows, on the abscissa, the duration of the various phases forming a given program, and on the ordinates, another parameter relating to said phases, in particular a temperature value.

62. The system, according to claim 41 wherein the information provided for a given second set of parameters suppresses at least one of the phases into which the associated

additional program is subdivided.

63. The system, according to claim 38, wherein the communication means for providing information is a duly programmed personal computer.

64. The system, according to claim 64, wherein means are provided for executing, under the direct control of the personal computer, one of the additional programs.

65. The system, according to claim 38, further including a control means for avoiding appliance operation in accordance with wrong or faulty programs that lead to unsatisfactory results or performance of the appliance.

66. The system, according to claim 38, wherein the communication means for providing information is a connection to a telephone line for communicating with a remote system through said line.

67. The system, according to claim 66, wherein the connection is a modem and the remote system includes an Internet site.

68. The system, according to claim 66, wherein the means for providing information downloads information from the remote system for storage in the memory as a second set of parameters.

69. The system, according to claim 38, wherein the means for providing information includes a display for displaying in a real time information concerning the progress status of the program being running on said appliance.

70. The system, according to claim 38, wherein the means for providing information

- the duration of the selected phase, and/or
- the temperature to be reached inside the oven during the selected phase, and/or
- the configuration and/or operating mode of heat sources for the oven (1), and/or
- the type of ventilation of possible use for the selected phase, and/or
- the modes of a possible use of a grill heater during the selected phase.